Welcome to STN International NEWS 1 Web Page URLs for STN Seminar Schedule - N. America The CA Lexicon available in the CAPLUS and CA files NEWS 2 Dec 17 Engineering Information Encompass files have new names NEWS 3 Feb 06 TOXLINE no longer being updated NEWS 4 Feb 16 NEWS 5 Apr 23 Search Derwent WPINDEX by chemical structure PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA NEWS 6 Apr 23 NEWS 7 May 07 DGENE Reload NEWS EXPRESS May 23 CURRENT WINDOWS VERSION IS V6.0a, CURRENT MACINTOSH VERSION IS V5.0C (ENG) AND V5.0JB (JP), AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2001 STN Operating Hours Plus Help Desk Availability NEWS HOURS General Internet Information NEWS INTER NEWS LOGIN Welcome Banner and News Items NEWS PHONE Direct Dial and Telecommunication Network Access to STN NEWS WWW CAS World Wide Web Site (general information) Enter NEWS followed by the item number or name to see news on that specific topic. All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties. FILE 'HOME' ENTERED AT 20:42:33 ON 01 JUN 2001 => file embase biosis medline caplus uspatfull COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.15 0.15 FILE 'EMBASE' ENTERED AT 20:43:07 ON 01 JUN 2001 COPYRIGHT (C) 2001 Elsevier Science B.V. All rights reserved. FILE 'BIOSIS' ENTERED AT 20:43:07 ON 01 JUN 2001 COPYRIGHT (C) 2001 BIOSIS(R) FILE 'MEDLINE' ENTERED AT 20:43:07 ON 01 JUN 2001 FILE 'CAPLUS' ENTERED AT 20:43:07 ON 01 JUN 2001 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

=> s hormone replacement therapy

L1

16113 HORMONE REPLACEMENT THERAPY

FILE 'USPATFULL' ENTERED AT 20:43:07 ON 01 JUN 2001

CA INDEXING COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

```
=> s gestagen or levonorgestrel or desogestrel or norethisterone or
medroxyprogesterone or megestrol or cyproterone acetate or dienogest or
drospirenone
          58099 GESTAGEN OR LEVONORGESTREL OR DESOGESTREL OR NORETHISTERONE OR
L2
                 MEDROXYPROGESTERONE OR MEGESTROL OR CYPROTERONE ACETATE OR
DIENO
                 GEST OR DROSPIRENONE
=> s estrone sulfamate or estradiol sulfamate or estriol sulfamate
              77 ESTRONE SULFAMATE OR ESTRADIOL SULFAMATE OR ESTRIOL SULFAMATE
L3
=> s 11 and 12 and 13
L4
               3 L1 AND L2 AND L3
=> d 14
      ANSWER 1 OF 3 CAPLUS COPYRIGHT 2001 ACS
L4
      2000:98344 CAPLUS
ΑN
      132:117958
DN
      Use of biogenic estrogen sulfamates for hormone
ΤI
      replacement therapy
     Elger, Walter; Lahteenmaki, Pekka; Lehtinen, Matti; Reddersen, Gudrun; Zimmermann, Holger; Oettel, Michael; Schwarz, Sigfrid
IN
PA
      Jenapharm G.m.b.H & Co. K.-G., Germany
      PCT Int. Appl., 33 pp.
SO
      CODEN: PIXXD2
DТ
      Patent
     German
LA
FAN.CNT 1
                        KIND DATE
                                                  APPLICATION NO. DATE
      PATENT NO.
                                                  _____
                                 20000210
                                                 WO 1999-DE1496
                                                                      19990513
PΙ
      WO 2000006175
                         A1
          W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG,
               KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
               CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      DE 19834931
                                 20000224
                                                  DE 1998-19834931 19980728
                          A1
      AU 9951481
                                 20000221
                                                  AU 1999-51481
                                                                      19990513
                           Α1
                                 20010523
                                                  EP 1999-936276
      EP 1100509
                          A1
                                                                      19990513
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO
      NO 2001000468
                         Α
                                 20010327
                                                  NO 2001-468
                                                                      20010126
```

WO 1999-DE1496 RE.CNT 5

(1) Elger, W; EXPERT OPINION INVEST DRUGS 1988, V7(4), P575

W

(2) Elger, W; JOURNAL OF STEROID BIOCHEMISTRY AND MOLECULAR BIOLOGY 1995, V55(3-4), P395 MEDLINE

19980728

19990513

- (3) Leiras Oy; WO 9501161 A 1995 CAPLUS
- (4) Michael, O; US 5633242 A 1997 CAPLUS
- (5) Schering Ag; WO 9733589 A 1997 CAPLUS

=> d 2

PRAI DE 1998-19834931 A

```
2000:80743 USPATFULL
AN
       Estra-1,3,5(10)-trien derivatives, processes for their preparation and
ΤI
      pharmaceutical compositions containing these compounds
       Schwarz, Sigfrid, Jena, Germany, Federal Republic of
IN
       Elger, Walter, Berlin, Germany, Federal Republic of
       Siemann, deceased, Hans-Joachim, late of Jena, Germany, Federal
Republic
       of by Christel Siemann, heir
       Lucas, heir, by Margit, Mettmann, Germany, Federal Republic of
       Siemann, heir, by Frank, Mitweida, Germany, Federal Republic of
       Reddersen, Gudrun, Jena, Germany, Federal Republic of
       Schneider, Birgitt, Jena, Germany, Federal Republic of
       Jenapharm GmbH & Co. KG, Jena, Germany, Federal Republic of (non-U.S.
PA
       corporation)
       US 6080735 20000627
PΙ
       WO 9605216 19960222
       US 1998-750943 19980202 (8)
ΑI
       WO 1995-DE877 19950703
              19980202 PCT 371 date
              19980202 PCT 102(e) date
                           19940809
       DE 1994-4429397
PRAI
       Utility
DT
LN.CNT 988
       INCLM: 514/176.000
INCL
       INCLS: 514/182.000; 540/047.000; 540/113.000; 552/510.000; 552/539.000;
              552/548.000; 552/552.000; 552/554.000; 552/555.000; 552/558.000;
              552/610.000; 552/611.000; 552/618.000; 552/626.000; 552/650.000
NCL
       NCLM:
              514/176.000
              514/182.000; 540/047.000; 540/113.000; 552/510.000; 552/539.000;
       NCLS:
              552/548.000; 552/552.000; 552/554.000; 552/555.000; 552/558.000;
              552/610.000; 552/611.000; 552/618.000; 552/626.000; 552/650.000
IC
       [7]
       ICM: A61K031-58
       ICS: A61K031-56; C07J043-00; C07J053-00
       540/47; 540/113; 552/510; 552/539; 552/548; 552/552; 552/554; 552/555;
EXF
       552/558; 552/610; 552/611; 552/618; 552/626; 552/650; 514/176; 514/182
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d 3
L4
     ANSWER 3 OF 3 USPATFULL
       1998:1778 USPATFULL
ΑN
TΙ
       Sulfamate derivatives of 1,3,5(10)-estratriene derivatives, methods for
       their production and pharmaceuticals containing these compounds
       Schwarz, Sigfrid, Jena, Germany, Federal Republic of
IN
       Elger, Walter, Berlin, Germany, Federal Republic of
       Reddersen, Gudrun, Jena, Germany, Federal Republic of
       Schneider, Birgitt, Jena, Germany, Federal Republic of
       Thieme, Ina, Graitschen, Germany, Federal Republic of
       Richter, Margit, Jena, Germany, Federal Republic of
PA
       Jenapharm GmbH & Co. KG., Jena, Germany, Federal Republic of (non-U.S.
       corporation)
PΙ
       US 5705495 19980106
ΑI
       US 1996-732742 19961018 (8)
PRAI
       DE 1995-19540233
                           19951019
       US 1996-17160
                           19960105 (60)
DT
       Utility
LN.CNT 495
INCL
       INCLM: 514/182.000
       INCLS: 514/176.000; 540/113.000; 552/510.000; 552/548.000; 552/552.000;
              552/558.000; 552/614.000; 552/617.000; 552/618.000; 552/624.000;
              552/626.000
NCL
              514/182.000
       NCLM:
             514/176.000; 540/113.000; 552/510.000; 552/548.000; 552/552.000;
       NCLS:
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552/558.000; 552/614.000; 552/617.000; 552/618.000; 552/624.000; 552/626.000

IC [6]

ICM: A61K031-56

ICS: A61K031-58; C07J001-00; C07J053-00

EXF 552/510; 552/548; 552/552; 552/558; 552/614; 552/617; 552/618; 552/624;

552/626; 514/176; 514/182; 540/113 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d ab

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2001 ACS

The invention relates to the use of biogenic estrogen sulfamates for the oral discontinuous application for hormone replacement therapy (HRT). The discontinuous administration takes place in intervals ranging from 2 to 40 days. The invention also provides the addnl. application of gestagens, preferably continuously in the form of an implant or in the form of an intrauterine releasing system (IUD). Estrone sulfamate, estradiol sulfamate, or an N-acyl sulfamate of estrone, estradiol or estriol having up to 7 carbon atoms in the acyl chain, or a combination comprised of two or more of the active ingredients, are used as biogenic estrogen sulfamates.

=> d hist

(FILE 'HOME' ENTERED AT 20:42:33 ON 01 JUN 2001)

FILE 'EMBASE, BIOSIS, MEDLINE, CAPLUS, USPATFULL' ENTERED AT 20:43:07 ON 01 JUN 2001

L1 16113 S HORMONE REPLACEMENT THERAPY

L2 58099 S GESTAGEN OR LEVONORGESTREL OR DESOGESTREL OR NORETHISTERONE

0

L3 77 S ESTRONE SULFAMATE OR ESTRADIOL SULFAMATE OR ESTRIOL

SULFAMATE

L4 3 S L1 AND L2 AND L3

=> d 3 ab

L4 ANSWER 3 OF 3 USPATFULL

AB The invention relates to new sulfamate derivatives of 1,3,5(10)-estratriene derivatives of the general formula I ##STR1## wherein the 3-sulfamate moiety is acylated, sulfonated or amidosulfonated. Furthermore, methods for the production of the compound

and pharmaceutical preparations containing this compound are described. The compounds according to the invention have an estrogenic effect.

=> d kwic

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2001 ACS

TI Use of biogenic estrogen sulfamates for hormone replacement therapy

The invention relates to the use of biogenic estrogen sulfamates for the oral discontinuous application for hormone replacement therapy (HRT). The discontinuous administration takes place in intervals ranging from 2 to 40 days. The invention also provides the addnl. application of gestagens, preferably continuously in the form of an implant or in the form of an intrauterine releasing system

```
(IUD). Estrone sulfamate, estradiol
     sulfamate, or an N-acyl sulfamate of estrone, estradiol or estriol
     having up to 7 carbon atoms in the acyl chain, or.
    biogenic estrogen sulfamate hormone replacement
ST
     therapy
     Hormone replacement therapy
ΙT
        (biogenic estrogen sulfamates for hormone replacement
      therapy)
TT
     Estrogens
     Progestogens
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (biogenic estrogen sulfamates for hormone replacement
      therapy)
IT
     Drug delivery systems
        (implants; biogenic estrogen sulfamates for hormone
      replacement therapy)
     Contraceptives
ΙT
        (intrauterine; biogenic estrogen sulfamates for hormone
      replacement therapy)
ΙT
     Drug delivery systems
        (oral; biogenic estrogen sulfamates for hormone
      replacement therapy)
ΙT
     Menopause
        (postmenopause; biogenic estrogen sulfamates for hormone
      replacement therapy)
     Amides, biological studies
IT
     Sulfates, biological studies
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (sulfamates; biogenic estrogen sulfamates for hormone
      replacement therapy)
IT
     979-32-8, Estradiol valerate
     RL: BAC (Biological activity or effector, except adverse); BIOL
     (Biological study)
        (biogenic estrogen sulfamates for hormone replacement
      therapy)
     50-27-1D, Estriol, N-acylsulfamate derivs.
                                                  50-28-2D, Estradiol,
ΙT
                               53-16-7D, Estrone, N-acylsulfamate derivs.
     N-acylsulfamate derivs.
     68-22-4, Norethisterone
                               71-58-9, Medroxyprogesterone
               302-22-7, Chlormadinone acetate 427-51-0, Cyproterone
               797-63-7, Levonorgestrel
                                          3562-63-8,
                 54024-22-5, Desogestrel
                                           65928-58-7,
     Megestrol
                 67392-87-4, Drospirenone
                                           148672-09-7
     Dienogest
     172377-52-5
                   175219-34-8
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (biogenic estrogen sulfamates for hormone replacement
      therapy)
     50-28-2, Estradiol, biological studies
                                               53-16-7, Estrone, biological
ΙT
               481-97-0, Estrone sulfate
     RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
        (biogenic estrogen sulfamates for hormone replacement
      therapy)
=> d 3 kwic
     ANSWER 3 OF 3 USPATFULL
       Estrogens play a major role in hormonal contraception, in menopausal
SUMM
     hormone replacement therapy (HRT), and for
       treating gynecologic diseases (e.g. mammary carcinoma) and andrologic
       diseases (e.g. prostatic carcinoma). For HRT and contraception,
       estrogens are mainly used together with a gestagen, e.g.
     levonorgestrel, desogestrel, norethisterone,
```

```
dienogest.
       . . . artificial menstrual cycle and other genital functions, which
SUMM
       could not be done to any satisfactory extent by just using a
     gestagen. In addition, endogenous and exogenous estrogens fulfil
       important central nervous and metabolic functions in the female
       organism: normal estrogen levels.
      Estrone sulfamate (2.0 g) was dissolved in pyridine.
DETD
      Acetic anhydride (100 ml) was added to this solution, and the mixture
      was kept.
      Estrone sulfamate (1.3 g) was dissolved in a mixture
DETD
      of dichloromethane (45 ml) and triethyl amine (0.5 ml).
       p-Dimethylaminopyridine (0.455 g) and.
       Triethyl amine (0.4 ml), p-dimethylaminopyridine (0.35 g) and propionic
DETD
       acid anhydride (7.4 ml) were added subsequently to a solution of
     estrone sulfamate (1.0 g) in dichloromethane (35 ml).
       The reaction mixture was stirred for 20 hours at +23.degree. C., then
it
       A solution of estrone sulfamate (2.0 g) in
DETD
       dichloromethane (70 ml) was esterified with butyloxylcarbonyl anhydride
       (2.5 g) in the presence of triethyl amine (0.8.
       A solution of estrone sulfamate (2.0 g) in
DETD
       dichloromethane (70 ml) was esterified with butyloxylcarbonyl anhydride
       (2.5 g) in the presence of triethyl amine (0.8.
=> s gestogen
           197 GESTOGEN
=> s estrogen sulfamate
            28 ESTROGEN SULFAMATE
=> s 11 and 15 and 16
L7
             0 L1 AND L5 AND L6
=> s gestogen and hormone replacement therapy
            10 GESTOGEN AND HORMONE REPLACEMENT THERAPY
=> s 18 and py<1998
   2 FILES SEARCHED...
   4 FILES SEARCHED...
             8 L8 AND PY<1998
=> dup rem
ENTER L# LIST OR (END):19
PROCESSING COMPLETED FOR L9
              6 DUP REM L9 (2 DUPLICATES REMOVED)
=> d 110 1-6 kwic ab bib
L10 ANSWER 1 OF 6 USPATFULL
       US 5686112 19971111
       On the other hand, therapeutic transdermal systems in the meantime
SUMM
found
       very wide application, in particular in hormone
     replacement therapy for the treatment of
       post-menopausal symptoms and osteoporosis and, with nitroglycerine, as
а
```

cyproterone acetate, chlormadinone acetate,

symptomatic treatment of angina pectoris in coronary. CLM What is claimed is: 6. The molded body of claim 4, wherein said active compound comprises estrogens, gestogens, glucocorticoids or mixtures thereof. To improve the efficacy and tolerability of customary topical ΑB applications for transdermal systemically acting pharmaceutical substances, single dosage topical pharmaceutical forms which are therapeutically exactly ready-to-administer are formed from suitable semi-solid pharmaceutical forms. The topical single doses are specified pharmaceutically with respect to their dose, their topical spreading behaviour and their permeation properties. Several of the topically ready-to-administer single doses are in this case accommodated in a common commercial packaging container. Complex treatments can be developed by means of different individual dosages or alternatively active compound combinations. As pharmacological active compounds, steroids, peptides, various analgesics, local anaesthetics and non-steroidal antirheumatics are employed in particular. The single dosage topical pharmaceutical form is a safe, easy to administer and inexpensive application form which makes possible a more exact topical therapy for systemic administrations than could previously be achieved using conventional topical administration forms. 97:104144 USPATFULL AN Single dosage semi-solid topical pharmaceutical forms for transdermal ΤI therapy! Liedtke, Rainer K., Munich, Germany, Federal Republic of IN APL-American Pharmed Labs, Inc., West Caldwell, NJ, United States (U.S. PΑ corporation) ΡI US 5686112 19971111 ΑI US 1995-569958 19951220 (8) Continuation of Ser. No. US 1993-82939, filed on 29 Jun 1993, now RLI abandoned PRAI DE 1992-4223004 19920713 Utility| Primary Examiner: Page, Thurman K.; Assistant Examiner: Benston, Jr., EXNAM William E. | Oblon, Spivak, McClelland, Maier & Neustadt, P.C. LREP Number of Claims: 15| CLMN Exemplary Claim: 1 ECL 3 Drawing Figure(s); 3 Drawing Page(s) | LN.CNT 322| CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 2 OF 6 BIOSIS COPYRIGHT 2001 BIOSIS Severe mesenterial thrombosis can be a complication of continuously ΤI applied oestrogen and gestogen therapy. SO Maturitas, (1997) Vol. 27, No. SUPPL., pp. 210. Meeting Info.: 8th International Congress on the Menopause Sydney, Australia November 3-7, 1996 ISSN: 0378-5122. ΙT Miscellaneous Descriptors CONTINUOUS APPLICATION; ESTROGEN; FEMALE; GESTOGEN; GYNECOLOGY; HORMONE REPLACEMENT THERAPY; HORMONE-DRUG; MENOPAUSE; PATIENT; PHARMACOLOGY; SEVERE MESENTERIAL THROMBOSIS; TOXICITY; TOXICOLOGY; VASCULAR DISEASE AN 1997:383984 BIOSIS DN PREV199799683187 TI Severe mesenterial thrombosis can be a complication of continuously applied oestrogen and gestogen therapy. Szendei, G. (1); Peter, A.; Magyar, Z.; Perner, F.; Papp, Z. ΑU (1) Dep. Obstetrics and Gynecol., Semmelweis Med. Sch., Budapest Hungary CS Maturitas, (1997) Vol. 27, No. SUPPL., pp. 210. SO Meeting Info.: 8th International Congress on the Menopause Sydney, Australia November 3-7, 1996

ISSN: 0378-5122.

Conference; Abstract; Conference

from

AB

- L10 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2001 ACS
- SO Obstet. Gynecol. (N. Y.) (1996), 88(6), 955-960 CODEN: OBGNAS; ISSN: 0029-7844
- AB To establish whether hormone replacement therapy affects postural balance in postmenopausal women.

  Nineteen healthy postmenopausal women with vasomotor symptoms were included. Median age was 54 yr,. . . difficult tests either cancel visual and distort somatosensory inputs or give distorted information

both the visual and somatosensory systems. Hormone
replacement therapy increased static balance performance
assessed by dynamic posturog. A highly significant improvement was seen
in the two most difficult tests. . . beneficial effects from estrogens
on postmenopausal fracture risk may include central nervous system
effects

on balance. Two weeks' addn. of **gestogen** to the treatment regimen did not counteract the estrogen effects.

To establish whether hormone replacement therapy affects postural balance in postmenopausal women. Nineteen healthy postmenopausal women with vasomotor symptoms were included. Median age was 54 yr, median time since menopause was 3 yr. They underwent dynamic posturog. before and after 4 and 12 wk of transdermal estrogen treatment (17.beta.-estradiol 50 .mu.g/day) as well as after 2 addnl. weeks of combined estrogen-progestogen treatment. The dynamic posturog. method quantifies the amplitude, frequency, and pattern of body sway and tests the visual, vestibular, and somatosensory systems, which together maintain balance. The two most difficult tests either cancel visual and distort somatosensory inputs or give distorted information from both the visual and somatosensory systems.

Hormone replacement therapy increased static balance performance assessed by dynamic posturog. A highly significant improvement was seen in the two most difficult tests between the pretreatment test and the test performed after 4 wk of estrogen therapy. This improvement was sustained after 12 wk and also during the 14th week, with the women on combined estrogen-progestogen treatment. Estrogen treatment increased balance performance measured by dynamic posturog., indicating that the beneficial effects from estrogens on postmenopausal fracture risk may include central nervous system effects on balance. Two weeks' addn. of gestogen to the treatment regimen did not counteract the estrogen effects.

- AN 1997:28339 CAPLUS
- DN 126:70344
- TI Effects of hormonal replacement therapy on the postural balance among postmenopausal women
- AU Hammar, Mats L.; Lindgren, Richard; Berg, Goeran E.; Moeller, Claes G.; Niklasson, Magnus K.
- CS Department of Obstetrics and Gynaecology and Otolaryngology, Faculty of Health Sciences, University Hospital, Linkoping, Swed.
- SO Obstet. Gynecol. (N. Y.) (1996), 88(6), 955-960 CODEN: OBGNAS; ISSN: 0029-7844
- PB Elsevier
- DT Journal
- LA English
- L10 ANSWER 4 OF 6 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V. DUPLICATE 1
- TI Bioavailability of orally administered sex steroids used in oral contraception and hormone replacement therapy
- SO Contraception, (1996) 54/2 (59-69). ISSN: 0010-7824 CODEN: CCPTAY
- ${\tt AB}$  . . and the various factors that may affect their bioavailability are

briefly described. Information regarding the bioavailability of the estrogens and gestogens, some of which are prodrugs, used in

oral contraception and hormone replacement therapy is summarized and the implications regarding the clinical use of these steroids are discussed.

- The concept of bioavailability is discussed with particular references to the sex steroids. Problems encountered in the measurement of bioavailability of these steroids and the various factors that may affect their bioavailability are briefly described. Information regarding the bioavailability of the estrogens and **gestogens**, some of which are prodrugs, used in oral contraception and **hormone**replacement therapy is summarized and the implications regarding the clinical use of these steroids are discussed.
- AN 96237498 EMBASE
- DN 1996237498
- TI Bioavailability of orally administered sex steroids used in oral contraception and hormone replacement therapy
- AU Fotherby K.
- CS Royal Postgraduate Medical School, Ducane Road, London W12 ONN, United Kingdom
- SO Contraception, (1996) 54/2 (59-69). ISSN: 0010-7824 CODEN: CCPTAY
- CY United States
- DT Journal; General Review
- FS 010 Obstetrics and Gynecology 037 Drug Literature Index
- LA English
- SL English
- L10 ANSWER 5 OF 6 BIOSIS COPYRIGHT 2001 BIOSIS
- TI Bioavailability of orally administered sex steroids used in oral contraception and hormone replacement therapy
- SO Contraception, (1996) Vol. 54, No. 2, pp. 50-69. ISSN: 0010-7824.
- AB. . . and the various factors that may affect their bioavailability are briefly described. Information regarding the bioavailability of the estrogens and gestogens, some of which are prodrugs, used in oral contraception and hormone replacement therapy is summarized and the implications regarding the clinical use of these steroids are discussed.
- IT Miscellaneous Descriptors
  BIOAVAILABILITY; CONTRACEPTIVE METHOD; ESTROGEN; FEMALE;
  GESTOGEN; GYNECOLOGY; HORMONE; HORMONE
  REPLACEMENT THERAPY; ORAL CONTRACEPTION; SEX STEROID;
  THERAPEUTIC METHOD
- AB The concept of bioavailability is discussed with particular references to the sex steroids. Problems encountered in the measurement of bioavailability of these steroids and the various factors that may affect their bioavailability are briefly described. Information regarding the bioavailability of the estrogens and **gestogens**, some of which are prodrugs, used in oral contraception and **hormone** replacement therapy is summarized and the implications regarding the clinical use of these steroids are discussed.
- AN 1996:426378 BIOSIS
- DN PREV199699157434
- TI Bioavailability of orally administered sex steroids used in oral contraception and hormone replacement therapy
- AU Fotherby, K.
- CS Royal Postgraduate Med. Sch., Ducane Road, London W12 ONN UK
- SO Contraception, (1996) Vol. 54, No. 2, pp. 50-69. ISSN: 0010-7824.
- DT General Review
- LA English
- L10 ANSWER 6 OF 6 USPATFULL

The present invention provides compositions and methods for the AB transdermal administration of a therapeutically effective amount of a synthetic 19-nor-progesterone (ST-1435) and an estrogen, in combination, together with, optionally, a suitable permeation enhancer. ΑN 94:44436 USPATFULL| Transdermal formulations, methods and devices! TIGale, Robert M., Los Altos, CA, United States IN Nedberge, Diane E., Los Altos, CA, United States Atkinson, Linda E., Portola Valley, CA, United States Alza Corporation, Palo Alto, CA, United States (U.S. corporation) PA US 5314694 19940524 PIUS 1993-39593 19930326 (8) ΑI 200906161 DCD Continuation-in-part of Ser. No. US 1992-848578, filed on 9 Mar 1992, RLI now patented, Pat. No. US 5198223 which is a continuation-in-part of Ser. No. US 1990-605726, filed on 29 Oct 1990, now patented, Pat. No. US 5122382 DT Utility Primary Examiner: Phelan, Gabrielle **EXNAM** Duvall, Jean M.; Sabatine, Paul L.; Stone, Steven F.| LREP Number of Claims: 20| CLMN ECL Exemplary Claim: 1|

DRWN 6 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 760|

## (FILE 'HOME' ENTERED AT 20:42:33 ON 01 JUN 2001)

|      | FILE 'EMBASE, BIOSIS, MEDLINE, CAPLUS, USPATFULL' ENTERED AT 20:43:07 ON 01 JUN 2001 |
|------|--|
| L1   | 16113 S HORMONE REPLACEMENT THERAPY  |
| L2   | 58099 S GESTAGEN OR LEVONORGESTREL OR DESOGESTREL OR NORETHISTERONE                  |
| 0    |  |
| L3   | 77 S ESTRONE SULFAMATE OR ESTRADIOL SULFAMATE OR ESTRIOL                             |
| SULF | AMATE  |
| L4   | 3 S L1 AND L2 AND L3   |
| L5   | 197 S GESTOGEN   |
| L6   | 28 S ESTROGEN SULFAMATE  |
| L7   | O S L1 AND L5 AND L6   |
| L8   | 10 S GESTOGEN AND HORMONE REPLACEMENT THERAPY  |
| L9   | 8 S L8 AND PY<1998   |
| L10  | 6 DUP REM L9 (2 DUPLICATES REMOVED)  |

US 5314694 19940524 PΙ Oral combination pills, implants and intrauterine devices for purposes SUMM of contraception and hormone replacement therapy (HRT) have been well documented for their problems such as inconvenience and side effects. Transdermal delivery of estrogens and . . . when applied transdermally, ST-1435 does not adversely affect SUMM the serum lipid concentrations in the body. This is particularly important in hormone replacement therapy for treatment of estrogen deficiency. Australian patent AU-A-15323/88 discloses a transdermal delivery system SUMM for the delivery of estrogens and synthetic gestogens for the treatment of climacteric syndrome (the withdrawal symptoms associated with menopause and caused by estrogen deficiency). The patent makes a general statement that natural gestogens, such as progesterone, do not pass through the skin in amounts sufficient to achieve adequate therapeutic effect using transdermal systems of conventional size, but that synthetic gestogens do have sufficient flux. Levonorgestrel (or d-norgestrel) is named in the patent as a synthetic gestogen which can be used in the transdermal system, and norgestrel and norethisterone-17-acetate are named as preferred synthetic gestogens for use in the system. ST-1435 is not mentioned as a candidate gestogen. It is to be noted here that a markedly greater amount of a gestogen and, consequently, a greater transdermal flux of the drug, is required for effective contraception than is required for treatment of climacteric syndrome. As discussed previously herein, it has been shown that levonorgestrel, the active enantiomer of the preferred gestogen norgestrel, does not, in fact, have a sufficient flux to provide a contraceptively effective plasma level of drug when applied. that the broad statement in the Australian patent is not in fact generally true and that sufficient flux of synthetic gestogens, particularly with respect to providing a contraceptive effect, is a continuing problem and cannot be predicted. Thus, it is by no means obvious that a particular synthetic gestogen could be effectively administered transdermally, with or without a permeation enhancer, and particularly in an amount sufficient to provide a therapeutic and especially a contraceptive effect. That the gestogen could be delivered in a therapeutically, including a contraceptively, effective amount from a reasonably sized system is especially desired and. . . . skin for a predetermined period of time the drugs and, if SUMM included, the permeation enhancer to provide effective contraception or hormone replacement therapy. The device is of a reasonable size useful for the application of the drugs and the enhancer to a human. . . weeks, followed by application for one week of a device as DETD disclosed herein but containing only the estrogen. For effective hormone replacement therapy, an alternative method of treatment is to apply devices of this invention containing estrogen only, preferably 17-.beta.-estradiol, for a period. What is claimed is: CLM 11. A method for providing hormone replacement

therapy to a woman, which method comprises: (a) administering a
drug formulation comprised of 17-.beta.-estradiol and ST-1435 at a rate
of. . .

13. A method for providing hormone replacement

therapy to a woman, which method comprises the steps of: (1)
 administering for a period of two weeks to an area. . . fatty acids,
 acetylated monoglycerides, and lactylated monoglycerides, and mixtures
 thereof; steps (1) and (2) being repeated as necessary to provide
hormone replacement therapy.